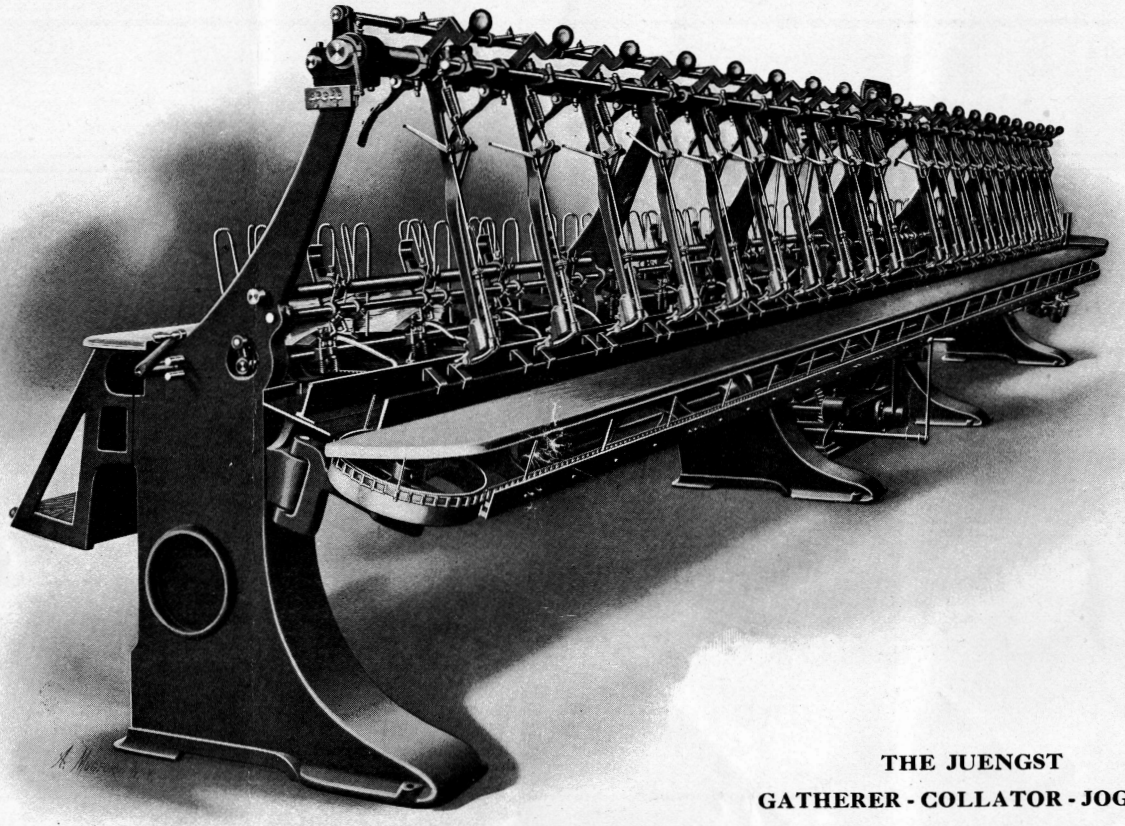
THE JUENGST

GATHERER-COLLATOR
JOGGER-STITCHER
COVERER

GEORGE JUENGST & SONS

CROTON FALLS, N. Y., U. S. A.



THE JUENGST

GATHERER - COLLATOR - JOGGER

THE illustration on the opposite page shows our GATHERER-COLLATOR-JOGGER, which we offer to the bookbinding trade as a machine the value of which is best understood by them.

WHAT WE CLAIM

SIMPLE IN ITS ACTION.
SMALLEST POSSIBLE FLOOR SPACE.
LABOR SAVING.
AND ABOVE ALL, **PERFECT BOOKS.**

These machines can be built with any number of boxes of any size from the smallest to those used for large catalogues.

The number of operators to run a twenty-four box machine is four; two to feed the sheets in the boxes, one to remove the imperfect signatures when the machine stops after detecting one, and one to remove the gathered books (if our patented stitcher is not attached). If our patented stitcher is attached to machine, the books after being stitched can be taken by a conveyor to any point desired.

THE ACTION OF THE MACHINE IS AS FOLLOWS

After the signatures are placed in the boxes in their proper order, the suckers which are seen in cut come up under the different piles and pull one sheet down from each pile, at which instant the gripper jaws enter and grasp same.

Then the small hooks on each side of the gripper pass under the pile, but over the grasped signature, and lift the signature in the boxes to lessen the friction on the one grasped. When the gripper draws the signatures out and drops them in the conveyor upon the preceding one, the chain moves those in the conveyor under the next gripper, and the above action is repeated until the first sheet passes under each pile and completes a book.

The detecting device is operated by the thickness of the sheets in signature or by the signature itself.

Thus, if there is one or more sheets missing, or one or more sheets too many in signatures, the small hook shown on each gripper arm will catch either on the upper edge or the lower of the notched plate as the signature is thicker or thinner than it should be, and by so catching will cause the machine to stop. At the same time it causes the lever with the indicating ball on its end to raise at the box where the error is, thus giving the operator a signal where to look for the trouble, to rectify which they will place a proper signature where the imperfect one would have fallen, and after removing the defective one from the gripper, start the machine by pulling down on said ball.

By referring to the illustration on page 6 which shows the stitcher attached to and working in unison with the machine, it will be noticed that the conveyor changes the position of the sheets from horizontal to vertical and then passes them in stitcher to be stitched. The stitch consists of two or more wire staples of the well-known form.

Capacity of Machine at 60 Revolutions per Minute, 2,500 to 3,000 Books per Hour

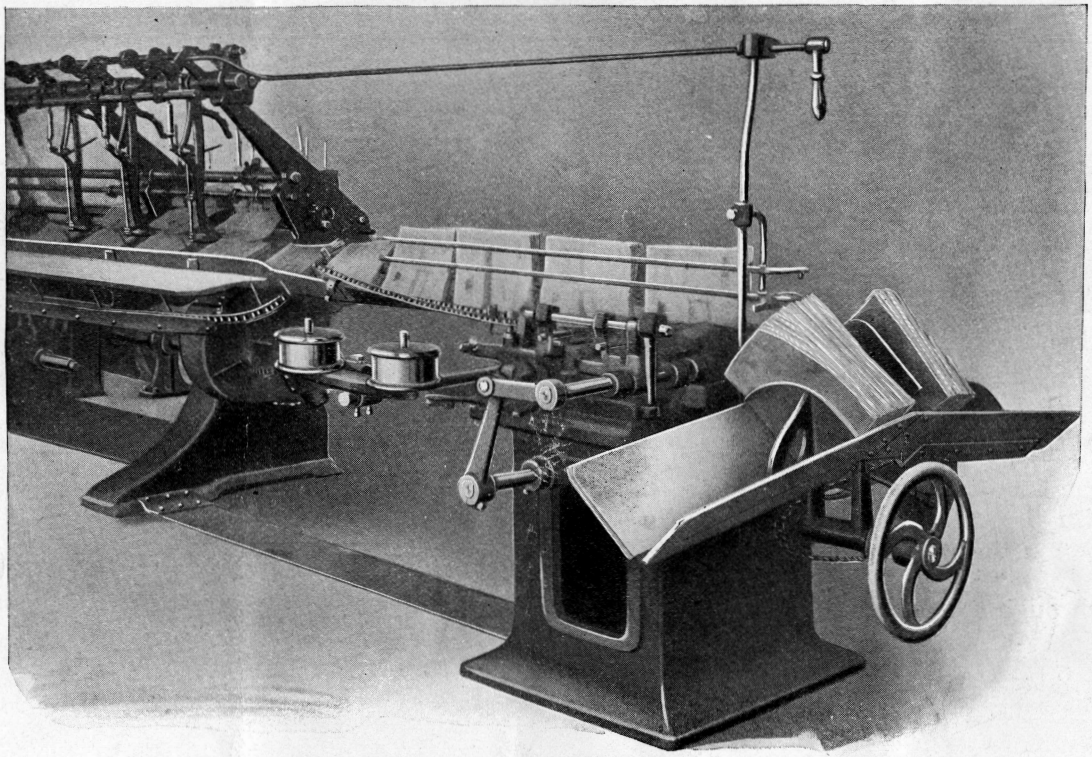
MACHINES FULLY COVERED BY PATENTS

STITCHER

THE Stitcher, as shown on page 6, attached to the gathering machine, receives the books as they come from the gathering machine in a vertical position. The stitches being driven and clinched while the books are passing through the stitcher, the stitching mechanism having a reciprocating motion.

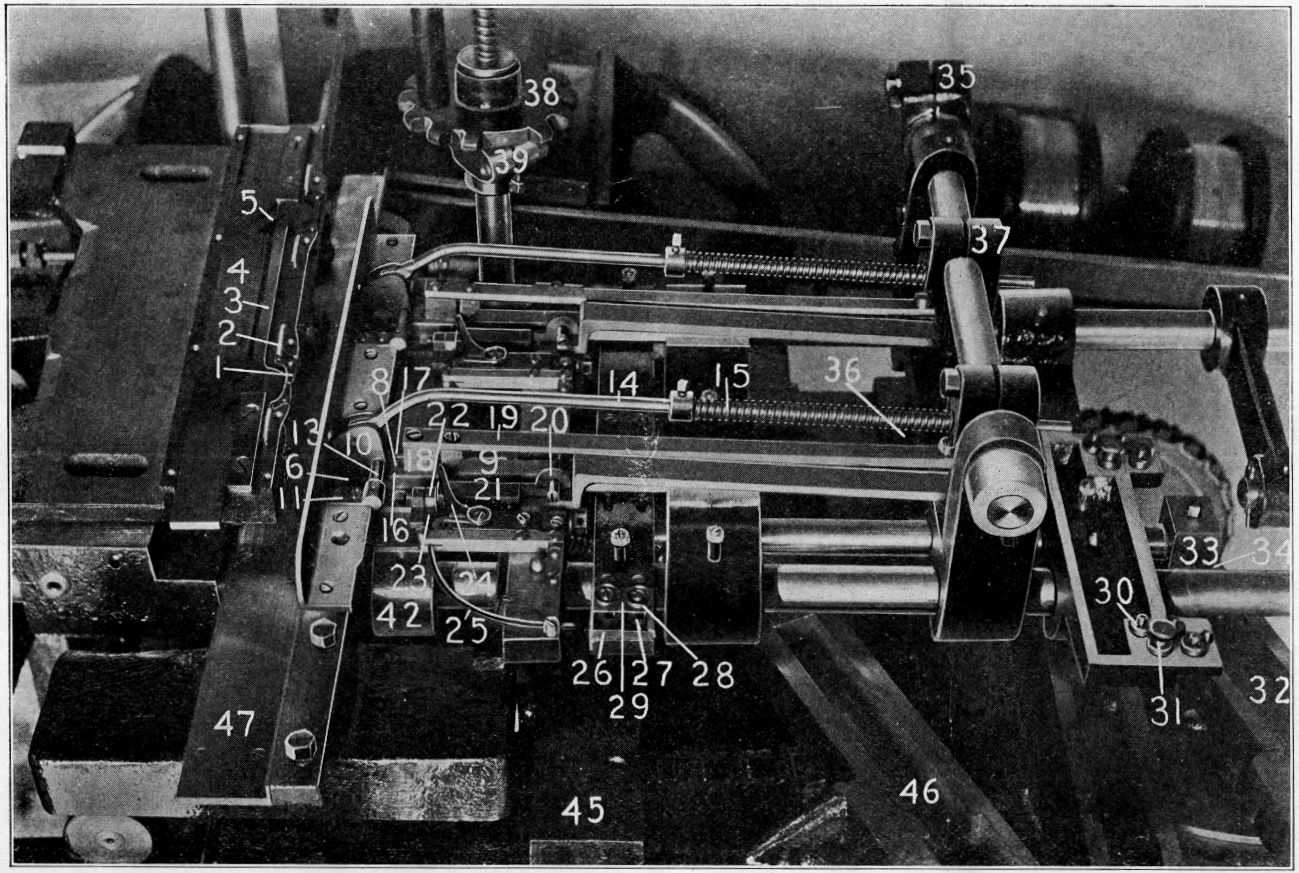
At the completion of the stitch, the books are delivered in the hopper, as shown.

On the other hand, if our three-machine combination is used, which is shown on page 9, the books, after being stitched, pass in the same position, namely, vertical, through a conveyor to the covering machine, which applies the glue and the cover.



GATHERER - COLLATOR - JOGGER - STITCHER

Four operations at one and the same time—consequently, great saving of time and labor



SEE NEXT PAGE FOR NAME AS PER NUMBER

REPAIR PARTS FOR STITCHER

1—Clincher
2—Clincher Spring
3—Clincher Lift Bar
4—Clincher Rod
5—Clincher Lift Link
6—Left Hand Driver Die
7—Right Hand Driver Die
(Does not show on cut)
8—Driver
9—Driver Rod
10—Supporter
11—Left Hand Supporter Bearing
12—Right Hand Supporter Bearing
(Does not show on cut)
13—Supporter Shaft
14—Supporter Rod
15—Supporter Spring
16—Left Hand Former Die
17—Right Hand Former Die
18—Former Hook
19—Former Hook Spring
20—Cutter
21—Cutter Box
22—Cutter Block
23—Check Dog
24—Wire Guide
25—Brass Guide Tube
26—Feed Dog
27—Feed Roller
28—Feed Roller Spring
29—Feed Roller Cover Plate
30—Straightener Roller
31—Adjustable Straightener Roller
32—Wire Feed Cam
33—Wire Feed Cam Roller Block
34—Wire Feed Cam Roller
35—Long Cutter Lever
36—Cutter Cam
37—Short Cutter Lever
38—Book Chain Sprocket
39—Book Chain Sprocket Carrier
40—Book Chain Pin } (Do not show on cut)
41—Plain Book Chain Link }
42—Former Bar
43—Former Bar Roller } (Do not show on cut)
44—Former Bar Roller Stud }
45—Former Cam
46—Driver Cam
47—Book Race Plate

REFER TO CUT OPPOSITE FOR REFERENCES

Trengst.
gatherer-
stitcher-
Cover

THREE-MACHINE COMBINATION

Five operations at one time

"THREE-MACHINE COMBINATION"

OR FIVE OPERATIONS AT ONE AND THE SAME TIME

By its three-fold capacity magazines, pamphlets, catalogs and such books may be handled with a facility considered hitherto impossible. The advantages are evident at a glance. The first machine is the gatherer-collator-jogger. Its operation may be briefly described thus:

The signatures are stacked in the hoppers in their regular order and can be replenished by supplying more of the same fold on top as the machine takes them away from the bottom, which is done by suckers being brought against the bottom of each pile and drawing down on the bottom signature or section, and at the same time the grippers swing in and grasp the drawn down signature, which, if it is correct (i. e., having the proper number of pages), will be drawn out and dropped into the conveyor channel, after which the carrier pins move the signature along in said channel to a point under the next section in time for the section to fall upon the preceding one, and in this way a continuous flow of gathered books are delivered at the opposite end of the machine. The collating is done as explained above, while the machine is in operation; should there be a leaf missing or a leaf too much in the section grasped by gripper jaws, it will cause the machine to stop and allow for correction, which is done by dropping a perfect section on the pile where the imperfect section would have fallen; the imperfect section is then taken from the gripper jaw and the machine started.

The jogging is done by a patented jogger chain which jogs each signature as it falls, and in that way a gathered, collated and jogged book, ready for the stitching, is produced.

The two remaining sections (properly they may be termed machines, by themselves), are respectively the stitcher and the coverer. The stitching consists of one, two or three wire staples, as is usual in work of this class. From this machine the books pass on to the covering machine, which is shown in the cut as nearest the reader and which is the last machine of the combination. This coverer has a number of important improvements that insure a much larger output than is possible on the old-style coverers. A very important feature of this coverer is one whereby the gluing device will remain depressed and away from the book if for any reason there should be no cover to glue. Thus the back of the book is not soiled, but passes through clean and can be fed in again for covering.

Thus it may be seen that with one turn of the gathering machine this "combination" will produce a gathered, jogged, collated, stitched and covered book. The speed is from sixty to ninety R. P. M., according to size of book.

The total weight is 15,850 pounds, made up as follows:

The weight of gatherer ((twenty sections)	9,000 pounds.
" " " stitcher	1,350 pounds.
" " " coverer	5,500 pounds.

It is built in three sizes, namely: 7″ x 10″, 9″ x 12″, 10″ x 14″. Any number of sections is possible.

AUTOMATIC COVERER

THE Coverer, illustrated on the preceding page, is our Patented Automatic Coverer, which has many features enabling it to have a rapid production.

One of the main features is—the non-gluing of the back of the book, if, for any reason, the cover does not arrive at its proper place to be applied to the book.

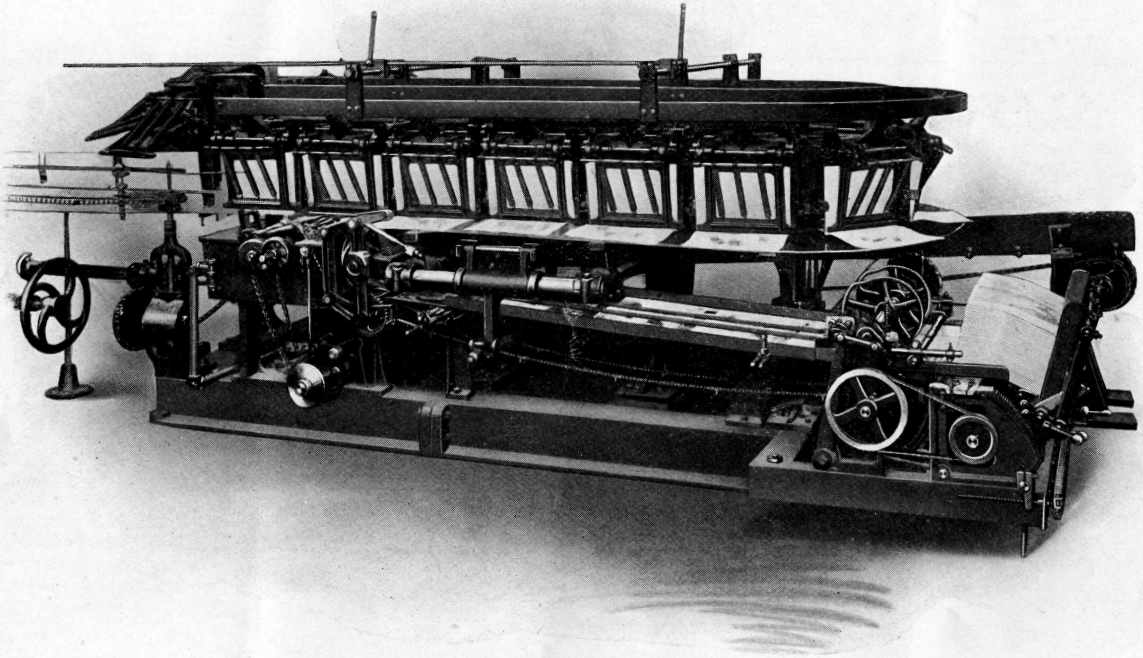
This may be caused by the supply of covers running out, defective covers, etc.

The general appearance is somewhat that of the ordinary coverer.

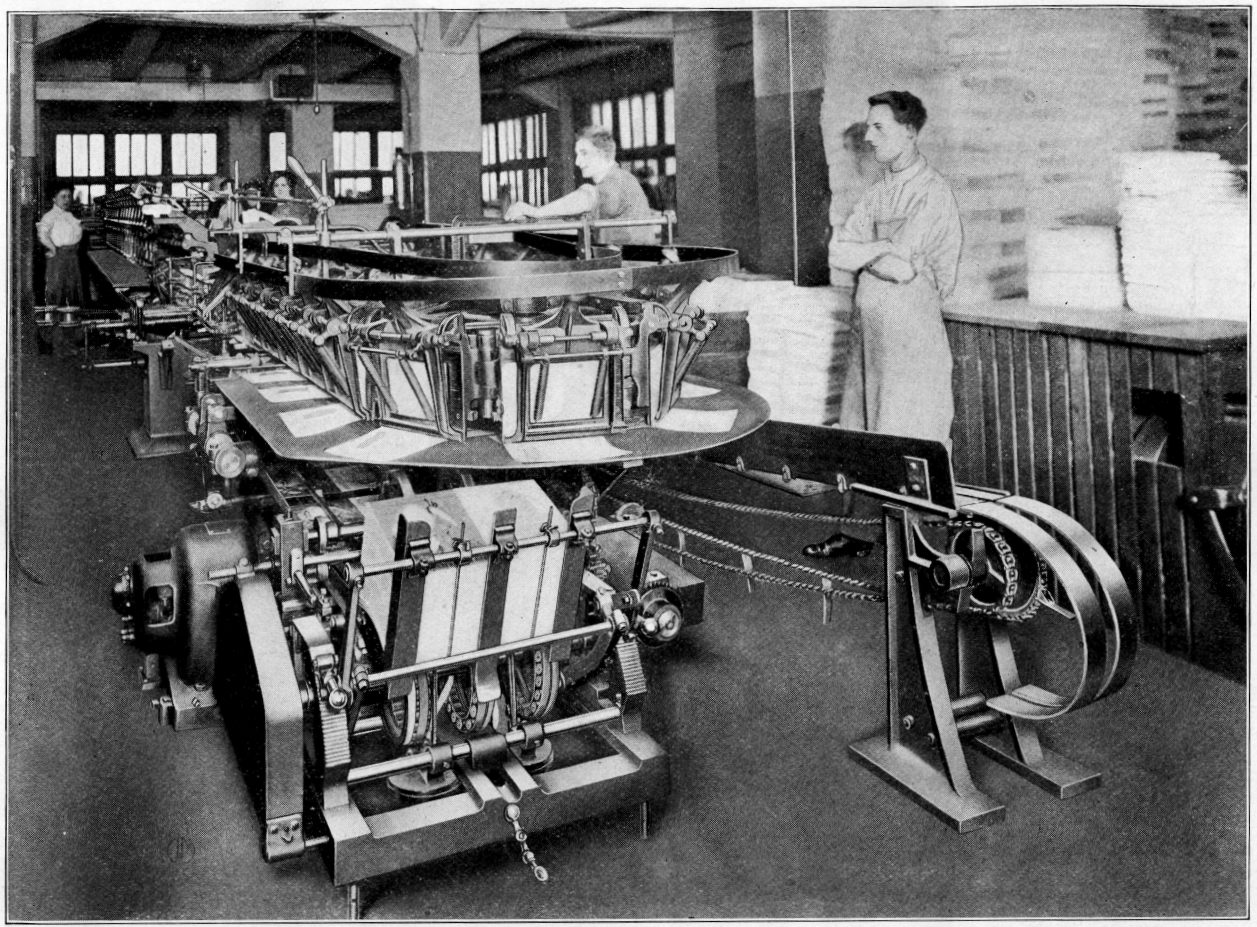
The delivery is on the opposite side of the machine from the gluing mechanism and can be arranged to deliver in packs of any number that may be desired, usually 6 to 10.

This machine can be arranged with the hopper to cover books independently of our gatherer-stitcher.

On the next page is an illustration of a three-machine combination in one of the most prominent binderies in New York.



AUTOMATIC COVERER



GATHERER-COLLATOR-JOGGER-STITCHER-COVERER

Five operations at one and the same time—consequently, great saving of time and labor

MACHINES NOW IN USE IN THE FOLLOWING BINDERIES

Public Printer	4	Washington, D. C.
Trow Company	4	201 E. 12th St., N. Y. City
Chas. Schweinler Press	4	141 E. 25th St., N. Y. City
Wm. Green	2	627 W. 43d St., N. Y. City
Jersey City Printing Co.	2	37 Montgomery St., Jersey City, N. J.
McCall Publishing Co.	3	236 W. 37th St., N. Y. City
DeVinne Press (connected)	2	395 Lafayette St., N. Y. City
P. F. Collier	1	416 W. 13th St., N. Y. City
Hill Publishing Co.	1	505 Pearl St., N. Y. City
*Carey Printing Co.	1	6-8-10 E. 13th St., N. Y. City
*Street & Smith	2	7th Ave. and 15th St., N. Y. City
*Chas. Francis Press	2	30 W. 13th St., N. Y. City
*Federal Printing Co.	2	231 W. 39th St., N. Y. City
Sears, Roebuck Co. (connected)	4	Chicago, Ill.
*American Medical Assn.	1	Chicago, Ill.
Abbott Press	1	Chicago, Ill.
Brock & Ranken	1	Chicago, Ill.
F. W. Hall Printing Co.	2	Chicago, Ill.
H. O. Shepard Co.	1	Chicago, Ill.
*Woodward Tiernan	1	St. Louis, Mo.
*Con P. Curran Printing Co.	1	St. Louis, Mo.
Lechtman Printing Co.	1	Kansas City, Mo.
*Whitworth Bros. Co.	1	Cleveland, Ohio
Britton Printing Co.	1	Cleveland, Ohio
*D. C. Cook Publishing Co.	1	Elgin, Ill.

Those marked * have (3) three-machine combinations

TROW
DIRECTORY, PRINTING
AND BOOKBINDING
COMPANY

PRINTING AND BOOKBINDING
DEPARTMENTS 201-213 E. 12TH ST.

New York, June 30, 1904.

Messrs. GEORGE JUENGST & SONS, Croton Falls, N. Y.

Dear Sirs: We take great pleasure in advising you that we are very much pleased with the three gathering machines installed in both our Brooklyn and New York binderies. They have given us entire satisfaction and are doing the work in one-third the space formerly required for the same output. We believe it is the best machine of its kind so far on the market, as we have seen all the other makes and know their possibilities. The time consumed for making changes from a large to a smaller size, or vice versa, is very little when the accuracy of the detector is considered. We believe that all first-class binderies will install this machine as soon as they know its merits.

Very respectfully yours,

TROW DIRECTORY, PRINTING AND BOOKBINDING COMPANY.
F. H. DOELLE, Manager.

WILLIAM GREEN
Publisher
324-330 PEARL STREET

New York, June 30, 1904.

Messrs. GEO. JUENGST & SONS,

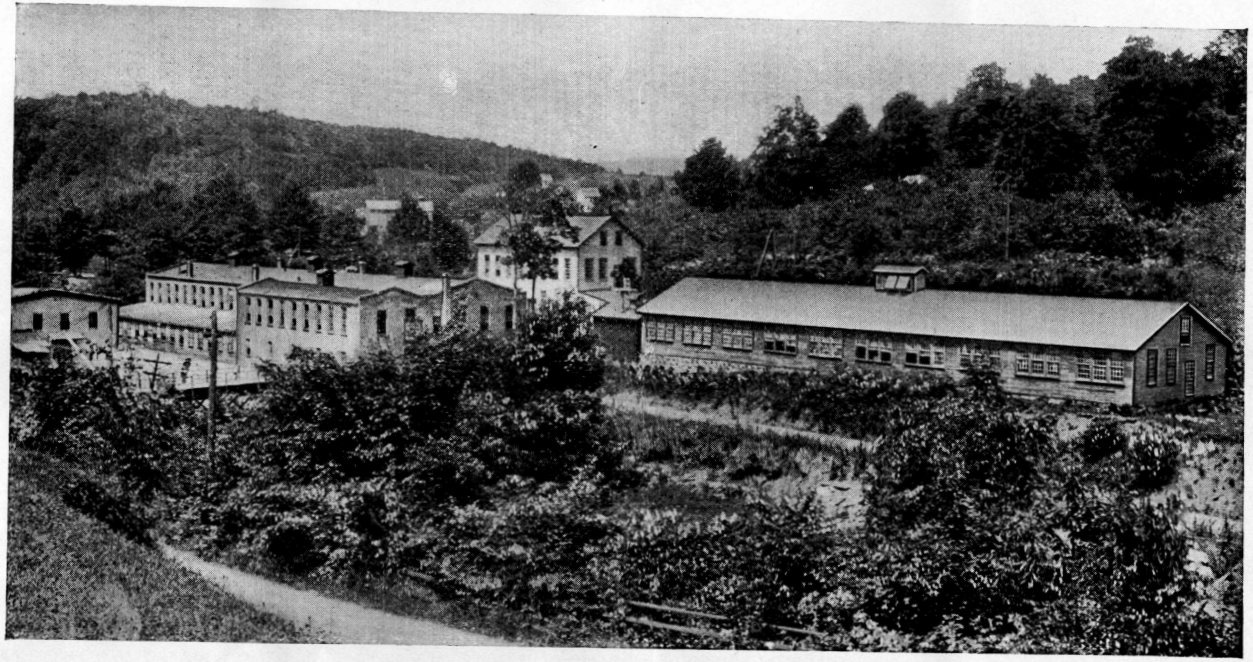
Croton Falls, N. Y.

Gentlemen:

We have had your Gatherer-Collator in operation now for about eleven months, and are pleased to say that it works perfectly satisfactorily.

Very truly yours,

WILLIAM GREEN.



JUENGST SHOPS, CROTON, N. Y.